

**Notice of Allowability**

Application No.

09/912,553

Examiner

(Iraj) Alan Rahimi

Applicant(s)

NAKAGIRI ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to September 28, 2005.
2. ☒ The allowed claim(s) is/are 1-3,6-8,10-12,15-17,19-21,24-26 and 29-31.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

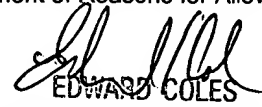
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date September 28, 2005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
EDWARD J. COLES  
SUPERVISORY PATENT EXAMINER  
BIOLOGY CENTER 2600

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Wannisky on September 28, 2005.

The application has been amended as follows:

1. **(Currently Amended)** A print control apparatus for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a finishing apparatus, the print control apparatus comprising:

setting information acquisition means for acquiring setting information including side-order setting information and sheet-order setting information in accordance with properties of the printing apparatus and finishing apparatus;

page layout determination means for specifying an order of a print side to be printed by the printing apparatus based on the setting information acquired by said setting information acquisition means and for determining a page layout of print data; and

generation means for generating the print data in accordance with the page layout determined by said page layout determination means,

wherein the side-order setting information is information designating whether the print side to be printed prior is an inner side or an outer side of a print sheet by the folding process,

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and the sheet-order setting information is information designating whether the print sheet to be printed prior is an outmost side sheet or an innermost side sheet by the folding process.

2. **(Previously Presented)** The print control apparatus according to claim 1, wherein said setting information includes at least the side-order setting information and the sheet-order setting information, and wherein said setting information is stored as a file for a printer driver in a memory device.

3. **(Original)** The print control apparatus according to claim 1, wherein said setting information acquisition means acquires said sheet-order setting information and said side-order setting information from the type of said output apparatus or used paper discharge orifice and the type of finisher.

4. **(Canceled)**

5. **(Canceled)**

6. **(Currently Amended)** A print control apparatus for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a plurality of saddle-stitch finishing apparatuses, which are interchangeably attachable to the printing apparatus, the print control apparatus comprising:

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layout control means for, if the print sheets printed by the printing apparatus are divided into a plurality of batch documents and the folding process for each batch document is performed by one of the plurality of saddle-stitch finishing apparatuses, which is currently attached to the printing apparatus ~~apparatus~~, controlling a layout of each page to arrange pages in consecutive page numbers for each batch document;

acquisition means for acquiring identification information of the saddle-stitch finishing apparatus, which is attached to the printing apparatus; ~~the finishing apparatus;~~ and

specification means for specifying a paper discharge property corresponding to the identification information acquired by said acquisition means, from a plurality of paper discharge properties; and

transmission order control means for controlling an ~~[[the]]~~ order of transmission of print data by each batch document based on a specified paper discharge property ~~specified by the identification information of the finishing apparatus acquired by said acquisition means.~~

7. **(Original)** The print control apparatus according to claim 6, wherein said transmission order control means controls the order of transmission of print data by each batch document based on designation of opening direction of book binding.

8. **(Original)** The print control apparatus according to claim 7, wherein said opening direction of book binding is included in print settings designated by a user via a user interface, and wherein paper discharge property in said output apparatus is previously determined for each output apparatus.

**9. (Canceled)**

**10. (Currently Amended)** A print control method for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a finishing apparatus, the print control method comprising:

a setting information acquisition step of acquiring setting information including side-order setting information and sheet-order setting information in accordance with properties of the printing apparatus and finishing apparatus;

a page layout determination step of specifying an order of a print side to be printed by the printing apparatus based on the setting information acquired at said setting information acquisition step and of determining a page layout of print data; and

a generation step of generating the print data in accordance with the page layout determined at said page layout determination step,

wherein the side-order setting information is information designating whether the print side to be printed prior is an inner side or an outer side of a print sheet by the folding process, and the sheet-order setting information is information designating whether the print sheet to be printed prior is an outmost side sheet or an innermost side sheet by the folding process.

**11. (Previously Presented)** The print control method according to claim 10, wherein said setting information includes at least the side-order setting information and the sheet-order

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setting information, and wherein said setting information is stored as a file for a printer driver in a memory device.

12. **(Original)** The print control method according to claim 10, wherein at said setting information acquisition step, said sheet-order setting information and said side-order setting information are acquired from the type of said output apparatus or used paper discharge orifice and the type of finisher.

13. **(Canceled)**

14. **(Canceled)**

15. **(Currently Amended)** A print control method for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a plurality of saddle-stitch finishing apparatus, which are interchangeably attachable to the printing apparatus, the print control method comprising:

a layout control step of, if the print sheets printed by the printing apparatus are divided into a plurality of batch documents and the folding process for each batch document is performed by a [[the]] finishing apparatus, which is currently attached to the printing apparatus, controlling a layout of each page to arrange pages in consecutive page numbers for each batch document;

an acquisition step of acquiring identification information of the finishing saddle-stitch apparatus, which is attached to the printing apparatus; and

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a specification step for specifying a paper discharge property corresponding to the identification information acquired in said acquisition step, from a plurality of paper discharge properties; and

a transmission order control step of controlling an [[the]] order of transmission of print data by each batch document based on a specified paper discharge property. ~~property specified by the identification information of the finishing apparatus acquired at said acquisition step.~~

16. **(Original)** The print control method according to claim 15, wherein at said transmission order control step, the order of transmission of print data by each batch document is controlled based on designation of opening direction of book binding.

17. **(Original)** The print control method according to claim 16, wherein said opening direction of book binding is included in print settings designated by a user via a user interface, and wherein paper discharge property in said output apparatus is previously determined for each output apparatus.

18. **(Canceled)**

19. **(Currently Amended)** A computer readable medium storing a program ~~product~~ for causing a computer to execute a print control method for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a finishing apparatus, the method comprising:

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a setting information acquisition step of acquiring setting information including side-order setting information and sheet-order setting information in accordance with properties of the printing apparatus and finishing apparatus;

a page layout determination step of specifying an order of a print side to be printed by the printing apparatus based on the setting information acquired at said setting information acquisition step and of determining a page layout of print data; and

a generation step of generating the print data in accordance with the page layout determined at said page layout determination step,

wherein the side-order setting information is information designating whether the print side to be printed prior is an inner side or an outer side of the print sheet by the folding process, and the sheet-order setting information is information designating whether a print sheet to be printed prior is an outermost side sheet or an innermost side sheet by the folding process.

20. **(Currently Amended)** The computer readable medium ~~program-product~~ according to claim 19, wherein the ~~the~~ <sup>[[said]]</sup> setting information includes at least the side-order setting information and the sheet-order setting information, and wherein the ~~the~~ <sup>[[said]]</sup> setting information is stored as a file for a printer driver in a memory device.

21. **(Currently Amended)** The computer readable medium ~~program-product~~ according to claim 19, wherein in ~~in~~ <sup>[[at]]</sup> said setting information acquisition step, the ~~the~~ <sup>[[said]]</sup> sheet-order setting information and the ~~the~~ <sup>[[said]]</sup> side-order setting information are acquired from a ~~a~~ <sup>[[the]]</sup> type of the ~~the~~ <sup>[[said]]</sup> output apparatus or used paper discharge orifice and a ~~a~~ <sup>[[the]]</sup> type of finisher.



22. (Canceled)

23. (Canceled)

24. (Currently Amended) A computer readable medium storing a program product for causing a computer to execute a print control method for generating print data to be printed by a printing apparatus such that a folding process for print sheets printed by the printing apparatus is performed by a plurality of saddle-stitch finishing apparatus, which are interchangeably attachable to the printing apparatus, the method comprising:

a layout control step of, if the print sheets printed by the printing apparatus are divided into a plurality of batch documents and the folding process for each batch document is performed by a [[the]] finishing apparatus, which is currently attached to the printing apparatus, controlling layout of each page to arrange pages in consecutive page numbers for each batch document;

an acquisition step of acquiring identification information of the saddle-stitch finishing apparatus, which is attached to the printing apparatus, and

a specification step for specifying a paper discharge property corresponding to the identification information acquired in said acquisition step, from a plurality of paper discharge properties; and

a transmission order control step of controlling an [[the]] order of transmission of print data by each batch document based on a specified paper discharge property. property specified by the identification information of the finishing apparatus acquired at said acquisition step.

25. **(Currently Amended)** The computer readable medium ~~program product~~ according to claim 24, wherein at said transmission order control step, the order of transmission of print data by each batch document is controlled based on a designation of an opening direction of book binding.

26. **(Currently Amended)** The computer readable medium ~~program product~~ according to claim 24, wherein the ~~the~~ opening direction of book binding is included in print settings designated by a user via a user interface, and wherein a paper discharge property in the ~~the~~ output apparatus is previously determined for each output apparatus.

27. **(Canceled)**

28. **(Canceled)**

29. **(New)** A print control apparatus for generating print data to be print-outputted by an output apparatus, the print control apparatus comprising:

layout control means for, if book bind printing to discharge a plurality of batch documents from said output apparatus is required, controlling a layout of each page to arrange pages in consecutive page numbers for each batch document;

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transmission order control means for, if book bind printing to discharge a plurality of batch documents from said output apparatus is required, controlling an order of transmission of print data by each batch document;

acquisition means for, if a plurality of saddle stitch finishers are interchangeably attachable to said output apparatus, acquiring identification information of a saddle stitch finisher, which is attached to said output apparatus; and

specification means for specifying a paper discharge property corresponding to the identification information acquired by said acquisition means, from a plurality of paper discharge properties,

wherein said transmission order control means controls the order of transmission of print data by each batch document based on the paper discharge property specified by said specification means.

30. (New) A print control method for generating print data to be print-outputted by an output apparatus, the print control method comprising:

a layout control step for, if book bind printing to discharge a plurality of batch documents from the output apparatus is required, controlling a layout of each page to arrange pages in consecutive page numbers for each batch document;

a transmission order control step for, if book bind printing to discharge a plurality of batch documents from the output apparatus is required, controlling an order of transmission of print data by each batch document;

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an acquisition step for, if a plurality of saddle stitch finishers are interchangeably attachable to the output apparatus, acquiring identification information of a saddle stitch finisher, which is attached to the output apparatus; and

a specification step for specifying a paper discharge property corresponding to the identification information acquired in said acquisition step, from a plurality of paper discharge properties,

wherein said transmission order control step controls the order of transmission of print data by each batch document based on the paper discharge property specified in said specification step.

31. (New) A computer readable medium storing a program for causing a computer to execute a print control method for generating print data to be print-outputted by an output apparatus, the print control method comprising:

a layout control step for, if book bind printing to discharge a plurality of batch documents from said output apparatus is required, controlling a layout of each page to arrange pages in consecutive page numbers for each batch document;

a transmission order control step for, if book bind printing to discharge a plurality of batch documents from the output apparatus is required, controlling an order of transmission of print data by each batch document;

an acquisition step for, if a plurality of saddle stitch finishers are interchangeably attachable to the output apparatus, acquiring identification information of a saddle stitch finisher, which is attached to the output apparatus; and

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a specification step for specifying a paper discharge property corresponding to the identification information acquired in said acquisition step, from a plurality of paper discharge properties,

wherein said transmission order control step controls the order of transmission of print data by each batch document based on the paper discharge property specified in said specification step.

***Response to Amendment***

2. The amended above was presented on September 28, 2005 by applicant after correcting the 101 issues and resubmitting the claims to properly incorporate allowable subject matter in the independent claims 6, 15 and 24 that was omitted in amendment filed on June 2, 2005.

Applicant also added new claims 29-31 that have the same allowable features of claim 6.

***Response to Arguments***

3. Applicant's arguments, see Remarks, filed June 2, 2005, with respect to claim 1, 10 and 19 have been fully considered and are persuasive. The rejection of claims has been withdrawn.

***Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance: The prior art and the prior art of record specifically, Ryan does not disclose all the limitations of the claim as presented by applicant in Remarks, pages 14 and 15, filed on June 2, 2005.

Additionally Satomi does not teach or discloses acquisition means for acquiring identification information of the saddle-stitch finishing apparatus, which is attached to the printing apparatus; and specification means for specifying a paper discharge property corresponding to the identification information acquired by said acquisition means, from a plurality of paper discharge properties; and

transmission order control means for controlling an order of transmission of print data by each batch document based on a specified paper discharge property.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Other Prior Art Cited***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kujirai et al. (US patent 6,509,977) discloses printing control for bookbinding printing.


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***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 571-272-7411. The examiner can normally be reached on Mon.-Fri. 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alan Rahimi  
September 28, 2005

  
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